



North Carolina Office of the Chief Medical Examiner
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Chief Medical Examiner and Chair, NC CFPT

Office of the Chief Medical Examiner
NC Child Fatality Prevention Team Annual Summary
2020 Child Deaths in NC (ages 0-17 years)

Report prepared by:

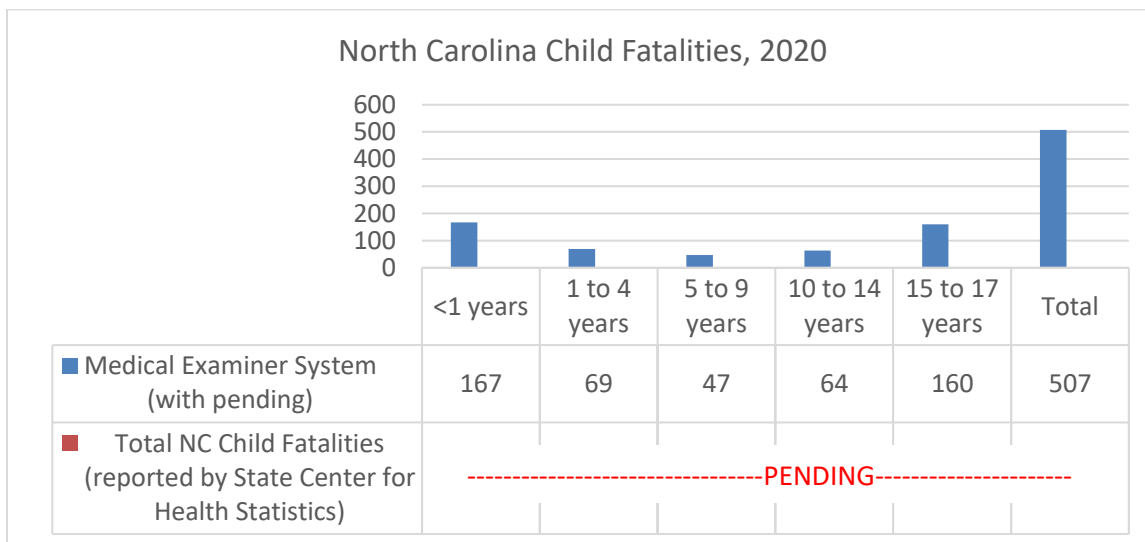
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TOTAL NUMBER OF DEATHS 2020 North Carolina under the Age of 18 Years

According to N.C. General Statutes § 130A-383, a medical examiner is notified to investigate the circumstances surrounding deaths due to violence, poisoning, accident, suicide, or homicide; occurring suddenly when the deceased had been in apparent good health or when unattended by a physician; or occurring under any suspicious, unusual or unnatural circumstance.

The North Carolina Medical Examiner system investigated the cause and manner of death for 514 children in 2020 which is approximately 1/3 of total North Carolina child deaths. Of the 514 cases within medical examiner jurisdiction, seven fatalities occurred outside of NC to non-NC resident children despite a final demise in North Carolina, those cases are excluded from the total represented below by the Medical Examiner System, for a total of 507.

Deaths reviewed under Medical Examiner jurisdiction will be included in the total number of child fatalities within a report produced by the North Carolina State Center for Health Statistics (SCHS). This report publishes the total number of child deaths in North Carolina each year. The report from SCHS is not released yet for the 2020 at the time this report is made available; updates will be made accordingly.



Cases investigated by the Medical Examiner system included a number of natural deaths, as well as accident, homicide, suicide and deaths for which no cause and/or manner of death could be determined. The Medical Examiner System assigns a means of death for each case which refers to how the death occurred. Means included unknown, motor vehicle, natural, firearm, asphyxia, drowning, blunt, fire, toxicology, other, SIDS, fall/jump, animal, electrocution, exposure, medical treatment, environmental, falling object, and sharp.

2020 Medical Examiner Child Fatalities

The Child Fatality Prevention Team (CFPT) staff at the Chief Medical Examiner’s office reviews all child fatalities that are investigated by the Medical Examiner System state-wide. With a total of 514 cases within medical examiner jurisdiction, represented below are child fatality reviews excluding pending cases (51) and fatalities that occurred outside of NC to non-NC resident children despite a final demise in North Carolina (7) which totals **456** children. Due to pending cases, numbers are subject to change. It is possible that the relatively small number of cases not included have characteristics that differ from the majority summarized here. This report will be updated as information becomes available.

Of note:

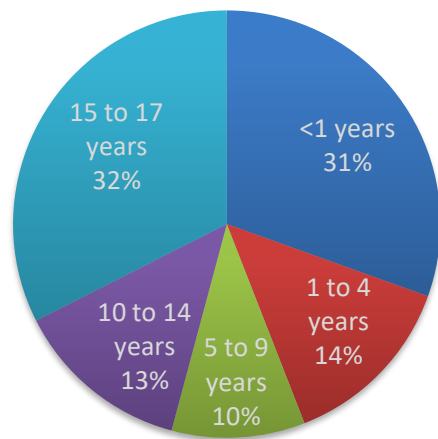
- Fourteen fatalities occurred in NC to non-NC resident children
- One fatality occurred in NC with final demise outside of NC
- Three fetal deaths are represented below among Homicide and Natural manners

<i>Manner and Means</i>	<i>Fatalities</i>	<i>Manner and Means</i>	<i>Fatalities</i>
ACCIDENT	179	NATURAL	59
Asphyxia	32	Asphyxia	1
Blunt	1	Natural	54
Drowning	24	SIDS	3
Electrocution	1	Unknown	1
Exposure	1	SUICIDE	57
Fall/Jump	1	Asphyxia	22
Fire/Burns/Carbon Mon./Explosives	10	Fall/Jump	1
Firearm	9	Firearms	31
Motor Vehicle	79	Toxin	3
Natural	2	UNDETERMINED	76
Other	2	Asphyxia	2
Toxin	17	Blunt	1
HOMICIDE	85	Exposure	1
Asphyxiation	1	Firearms	2
Blunt	17	Other	1
Drowning	1	Toxin	1
Exposure	1	Unknown	68
Fall/Jump	1		
Firearms	60		
Other	2		
Sharp	1		
Toxin	1	PENDING	51

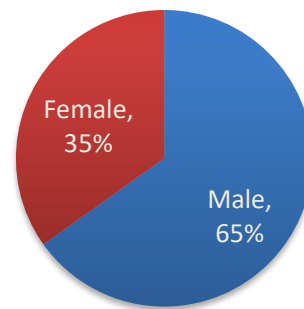
2020 Medical Examiner Child Fatalities Demographics

All demographics represented below are of completed cases (456) and do not include Pending cases or fatalities that occurred outside of NC to non-NC resident children despite a final demise in North Carolina. Please note, percentages are rounded to the nearest whole number.

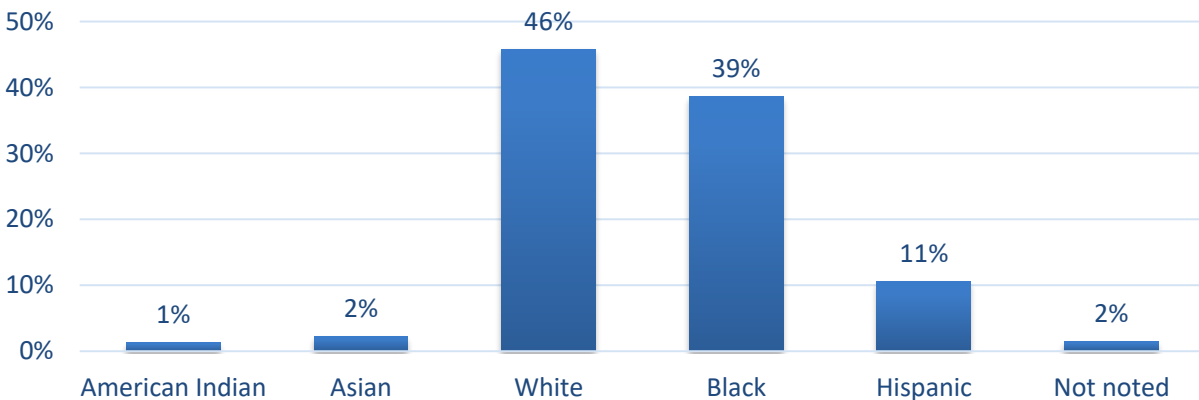
2020 Medical Examiner System Child Fatalities by Age Category



Percentage of 2020 Child Fatality by Gender



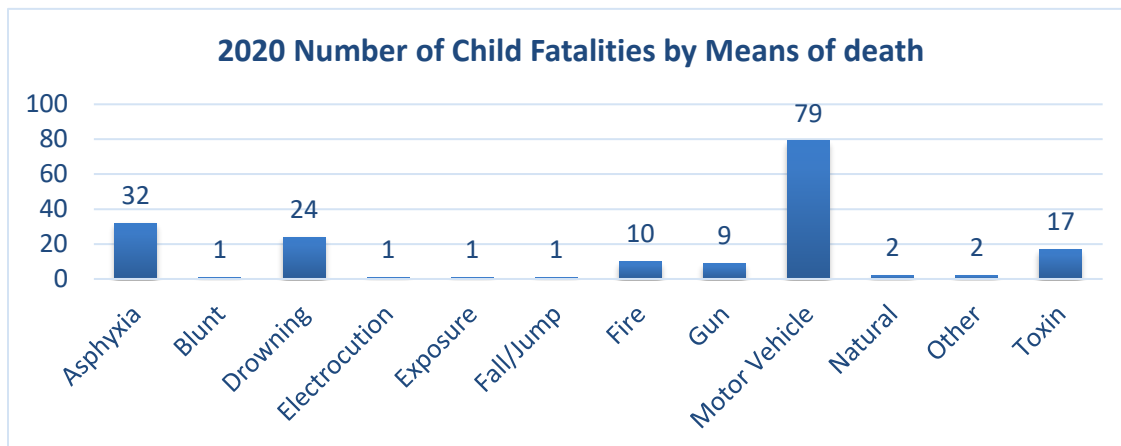
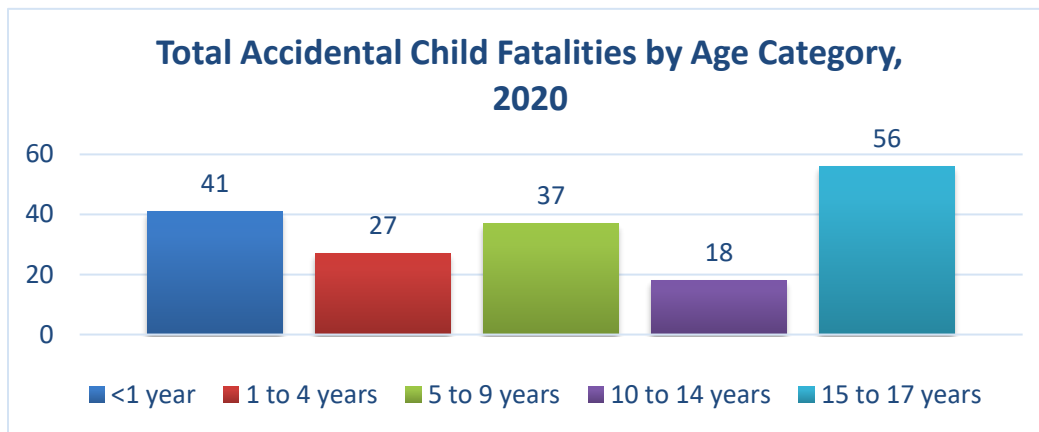
Race/Ethnicity Percentage, 2020 Child Fatalities



Review of 2020 Medical Examiner Child Fatalities by Manners

ACCIDENT

Each year, accidental deaths comprise the largest number of non-natural deaths of children in North Carolina. In 2020, there were 179 deaths investigated by the NC Medical Examiner System certified as accident in manner. Multiple means of death are identified under the manner of Accident based upon circumstances of these deaths.

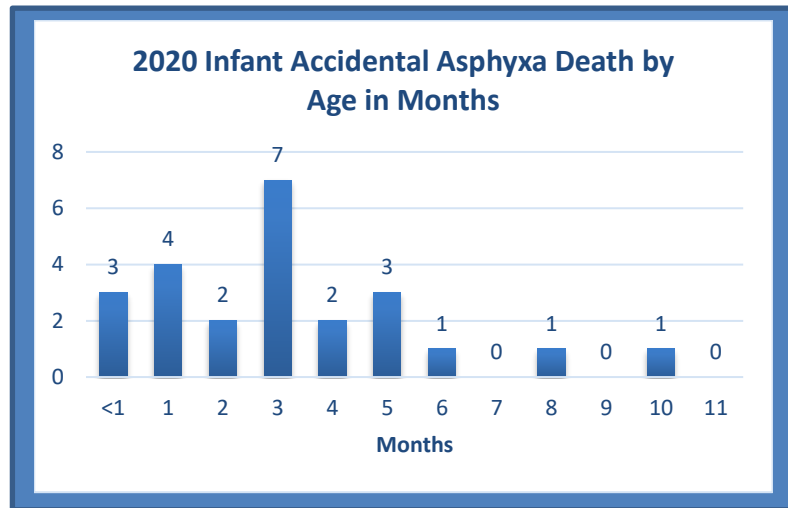
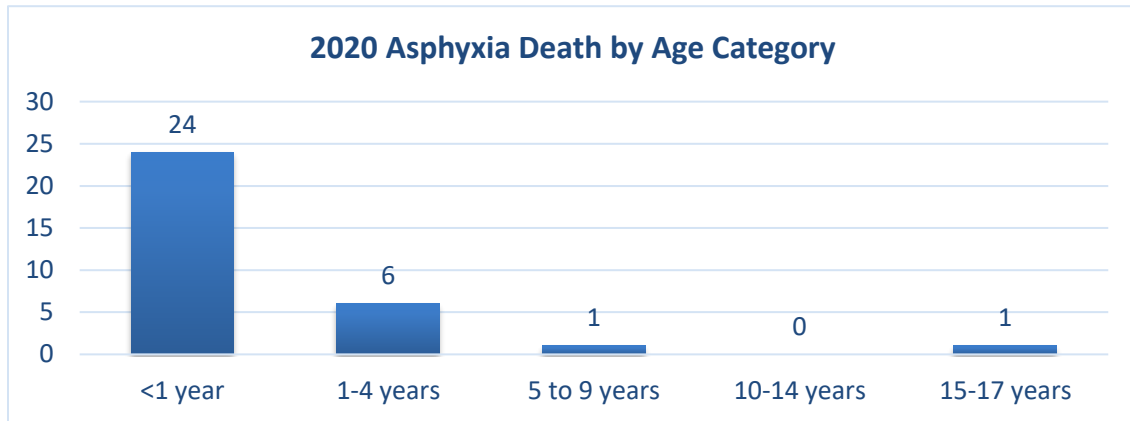


Asphyxia

Accidental asphyxiation was the means of death for 32 children in 2020. Infants constituted the majority of the asphyxiation deaths at 24 fatalities with all of them attributed to accidental asphyxiation in a sleep environment—either during co-sleeping or by being placed in an unsafe sleep environment. Additional information

on infants in unsafe sleep environments at the time of death can be found in the “2020 Spotlight on Infant Fatality” report on the OCME website under N.C. Child Fatality Prevention Team. (<https://www.ocme.dhhs.nc.gov/nccfpp/index.shtml>)

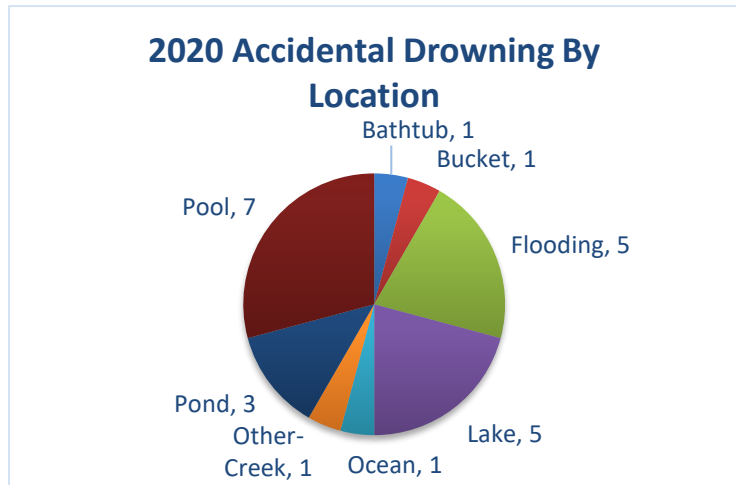
Eight accidental asphyxiation deaths of children between the ages of 1 and 4 years included 4 incidents of choking, 2 incidents in a sleep space, a ligature strangulation, and one hanging.



Drowning

Drowning resulted in the deaths of 24 children in 2020. In terms of location, 7 drownings occurred in a pool, 5 in a lake, 5 in flooded areas, 3 in ponds, 1 each in a bathtub, bucket, ocean, and creek.

AGE CATEGORY	NUMBER OF CHILDREN
<1 YEAR	0
1-4 YEARS	14
5-9 YEARS	5
10-14 YEARS	2
15-17 YEARS	3



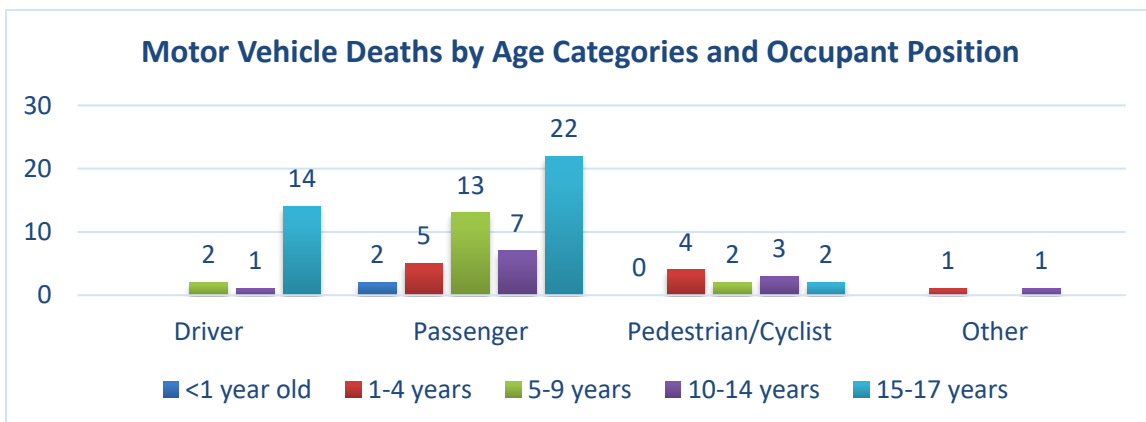
Vehicle-related

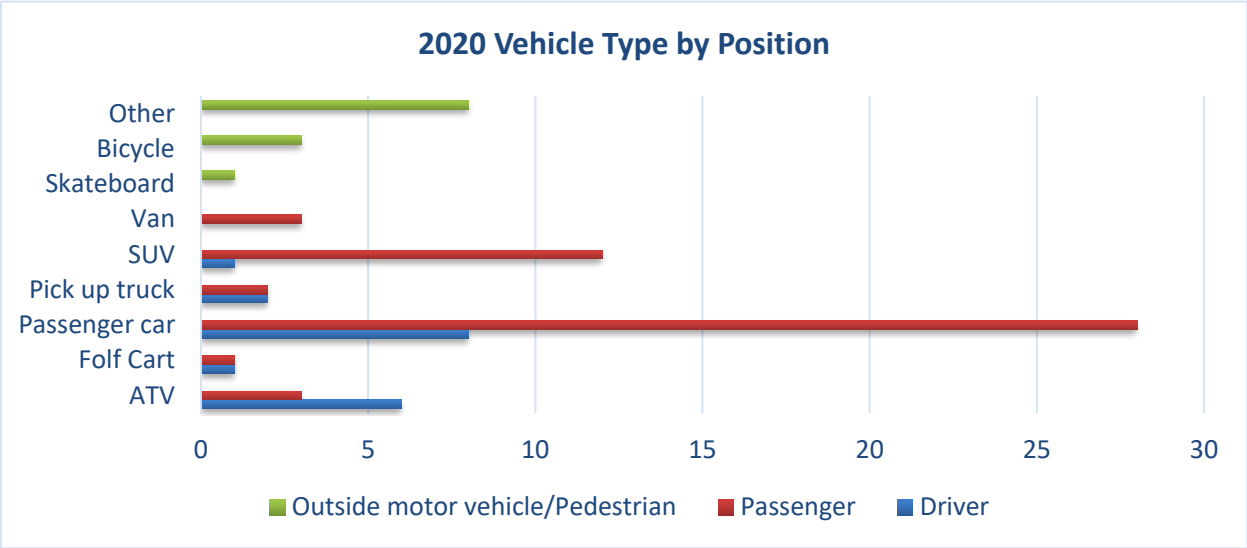
In 2020, there were 79 vehicle related deaths. The majority were passengers with a total of 49, while 17 were drivers, and 13 were outside of a vehicles: Pedestrian, Bicyclist, or other motor device.

Among the 17 drivers, 5 were 17-years-old, 5 were 16-years-old, 7 were 15-years-old or younger. Vehicles driven include: ATVs, golf carts, passenger cars, pickup trucks, and an SUV.

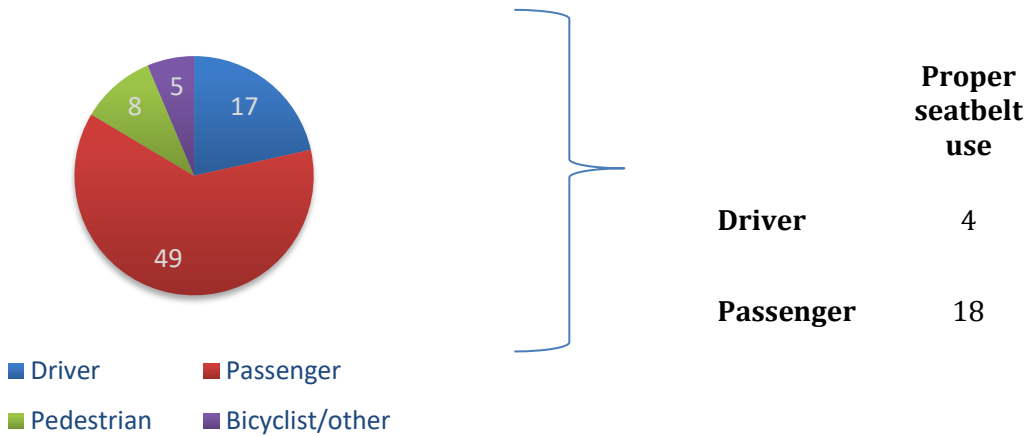
Influence of drug or alcohol contributed to 5 motor vehicle accidents involving child passengers driven by a driver under the influence of drugs or alcohol.

Of all the children involved in vehicle-related accidents, 24 children were either not wearing seat belts or were improperly restrained. Some vehicle types do not have restraint options, such as an ATV. Those types of vehicles were not counted in the total number not wearing a seatbelt or improperly restrained. Of the 17 drivers, 4 were properly restrained and of the 48 passengers, 18 were properly restrained. Of note, on scene of a vehicle accident, it is sometimes unable to be determined if the decedent was properly restrained at the time of the incident.





Motor Vehicle Deaths by Position



Toxins

There were 17 deaths from toxic substances (i.e. poisoning). Eleven of the deaths were children 15-17 years old, 2 children were between 10 and 14 years, and four children were between 1 and 4 years of age. The synthetic opioid fentanyl was found in 13 of the 17 toxin related fatalities.

Fire

There were a total of 10 deaths from fires/burns/carbon monoxide. Fires/burns/carbon monoxide contributing to these deaths were 8 separate incidences, with some occurrences claiming multiple lives. Among these 8 incidences,

8 deaths occurred in a residence setting and 2 deaths in a vehicle. Sources of the residence fires ranged from appliances, kerosine heaters and other unknown sources.

**FIRE-RELATED CHILD FATALITIES,
2020**

AGE CATEGORY OF CHILDREN	Number of Children
<1 YEAR	0
1-4 YEARS	1
5-9 YEARS	7
10-14 YEARS	1
15-17 YEARS	1

Firearms

There were a total of 9 deaths from accidental firearm injuries. Three children were ages 1 to 4 years, 5 were ages 5 to 9 years, and one was 15 to 17 years. In 5 of the 9 deaths, the decedent found the firearm where it was stored or accessible to the child; in 4 of the cases, someone else was handling a firearm (cleaning/clearing/playing, etc) when it fired and hit the decedent.

Remaining means with an accidental manner, totaling 8 deaths, included

- One blunt injury means
- One electrocution means
- One exposure means
- One fall/jump
- Two other—likely asphyxia related means
- Two natural means

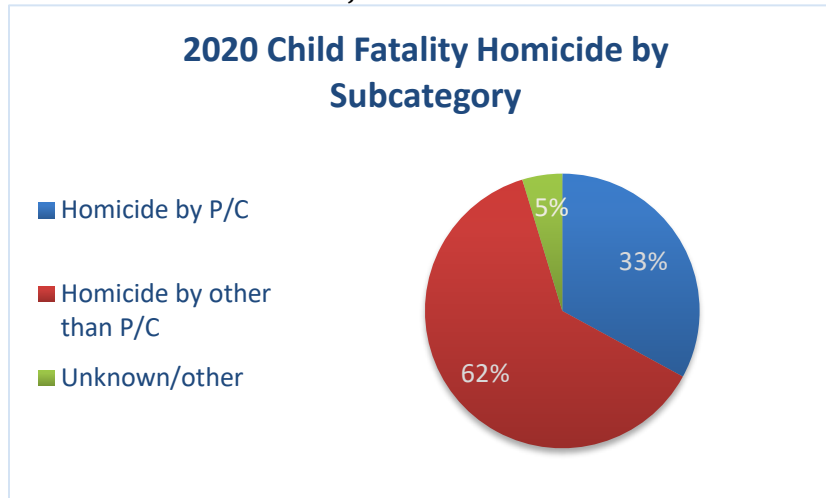
HOMICIDES

There were 85 children who died at the hands of another in 2020.

The CFPT staff designates subcategories to child homicides: homicides that occur at the hands of a parent or caregiver and homicides by other. These subcategories assist in identifying clear trends among the ages/manners.

Homicide by Parent or Caregiver is a subset of homicides defined as a death that is the direct result of the action(s) of the person(s) responsible for the child’s well-being

at the time of the death. This classification is assigned by the NC Child Fatality Prevention Team based on the injuries and circumstances of the death.



Homicide by Parent or Caregiver

Homicide by Parent or Caretaker deaths accounted for 28 of the 85 total child homicides in 2020. Infants, children under 1 year of age, accounted for 12 of this subcategory. The remaining children were between the ages of 1-17 years:

- Fourteen deaths among ages 1 to 4 years
- One death among ages 10-14 years
- One death among ages 15 to 17 years

Regarding means, blunt force trauma was the assigned means for 16 deaths, 7 deaths occurred from use of a firearm, two with a means of other and the following accounted for 1 death each: asphyxia, exposure, and toxin.

Homicide by Other

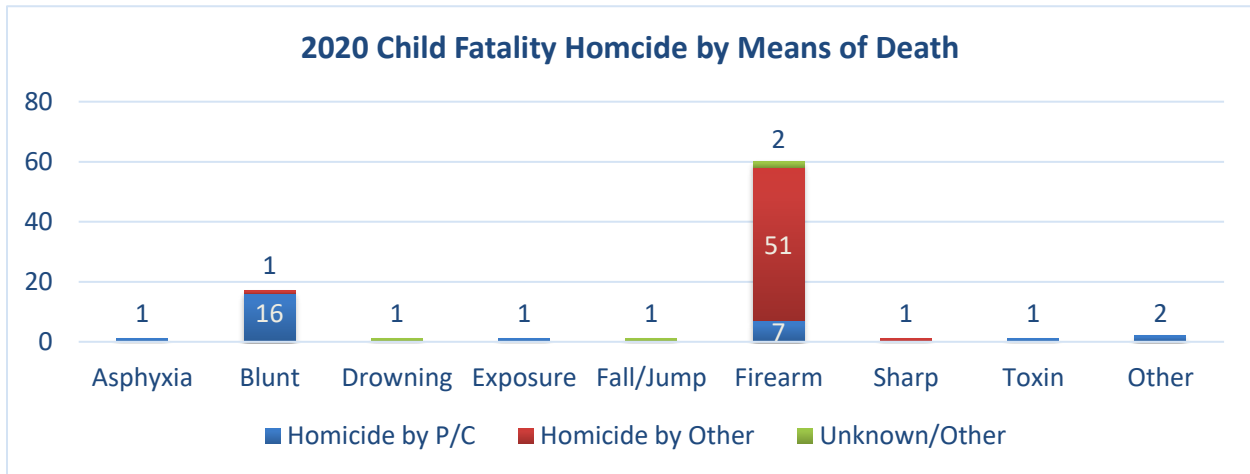
Other homicides, the other subcategory in which the parent or caregiver was not a suspect or perpetrator, comprised 53 of the 85 total 2020 child homicides. Teenagers between the ages of 15 and 17 years accounted for nearly 80% at 42 deaths.

Remaining cases by age category:

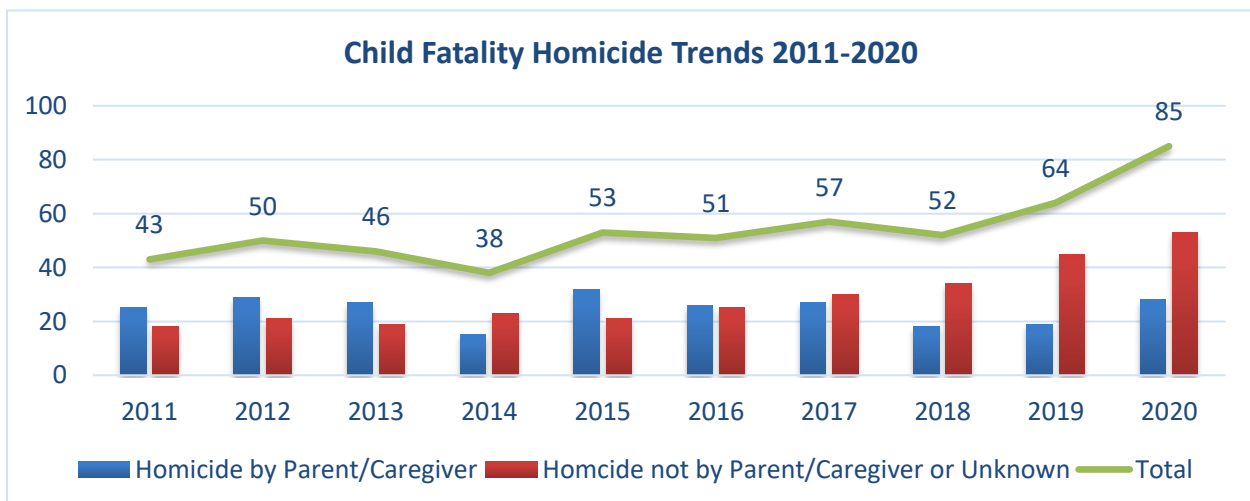
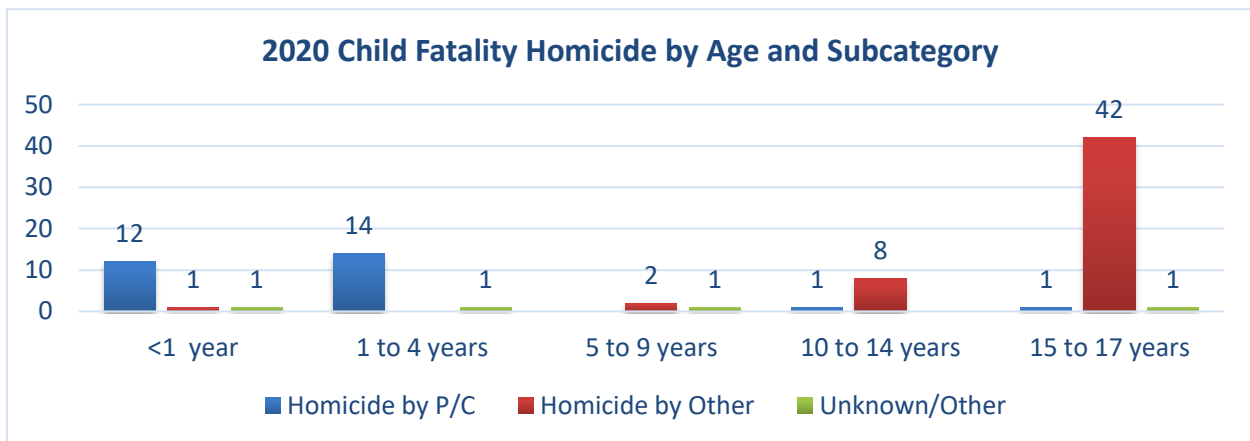
- Under one year of age accounted for 1 death
- Ages 5 to 9 years accounted for 2 deaths
- Ages 10 to 14 years accounted for 8 deaths

Regarding means of homicides not by a parents or caregiver, 51 deaths (96%) were due to firearms, with 1 death due to blunt trauma and another to sharp injury.

Four additional cases were without sufficient information to categorize by the subcategories. One case in each of the following age groups: under on year of age, 1 to 4 years, 5 to 9 years, and 15 to 17 years.



Of all the homicides, regardless of perpetrator, race and ethnicity of decedents is as follows: Black non-Hispanic children comprised the majority of homicides, 52 deaths; 24 deaths were of White non-Hispanic children; 6 children identified as Hispanic; 2 deaths of children Asian decent and 1 Other.

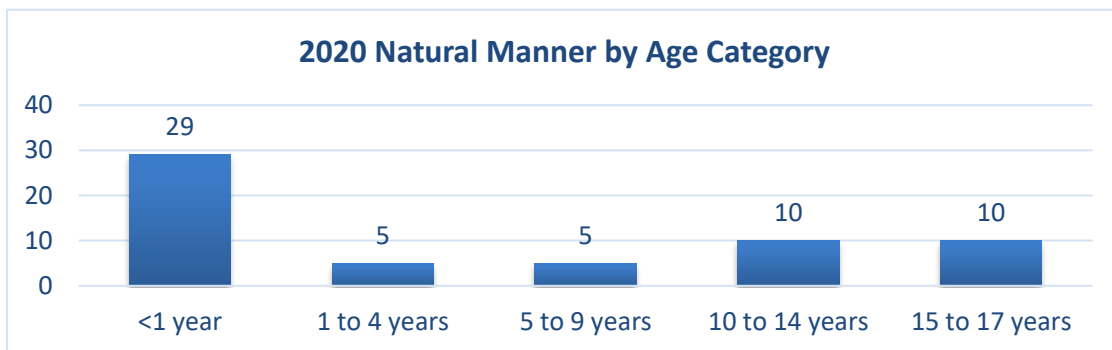


NATURAL

Fifty-nine deaths were determined to be natural in manner. Of these, 3 deaths were given a classification of Sudden Infant Death Syndrome (SIDS), and 56 deaths were other natural causes.

Child fatalities previously classified with a Natural manner as Sudden Infant Death Syndrome (SIDS) have transitioned to utilize the Undetermined manner and means of death if the circumstances include potential unsafe sleep factors. This transition from SIDS to Undetermined began around 2012. Since then, the deaths determined to be Natural SIDS classifications have continued to decrease, however, deaths in the Undetermined manner have greatly increased.

Means of death with a natural manner in 2020 included asthma, congenital health defect/disease, complications of prematurity, non-cardiac congenital disorder, pneumonia, seizure, sepsis, and a variety of complications/infections/diseases and illnesses.



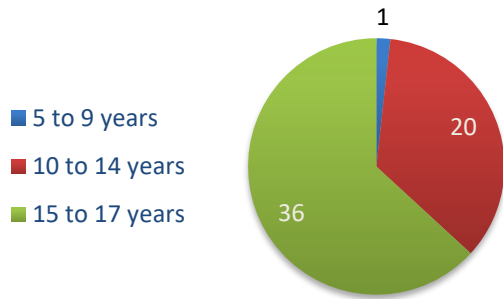
SUICIDE

Suicide was the manner of death of 57 children in 2020. Most of the deaths with a suicide manner were of children between the ages of 15 to 17 years, accounting for 36 deaths (63%). Additionally, there were 21 deaths with a suicide manner of children between the ages of 5 to 14 years.

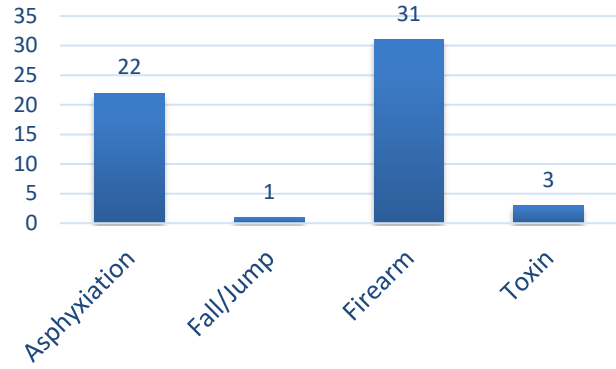
Males accounted for 41 deaths, females for 16 deaths.

The means of death in suicides included 31 deaths from use of a firearm, 22 deaths from an asphyxia event, 3 deaths from toxins, and one death related to a fall/jump.

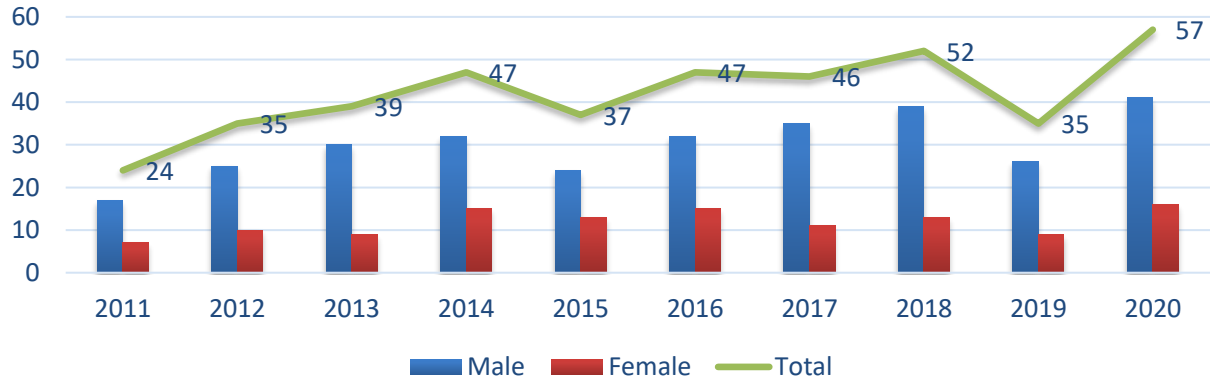
2020 Suicide by Age Category



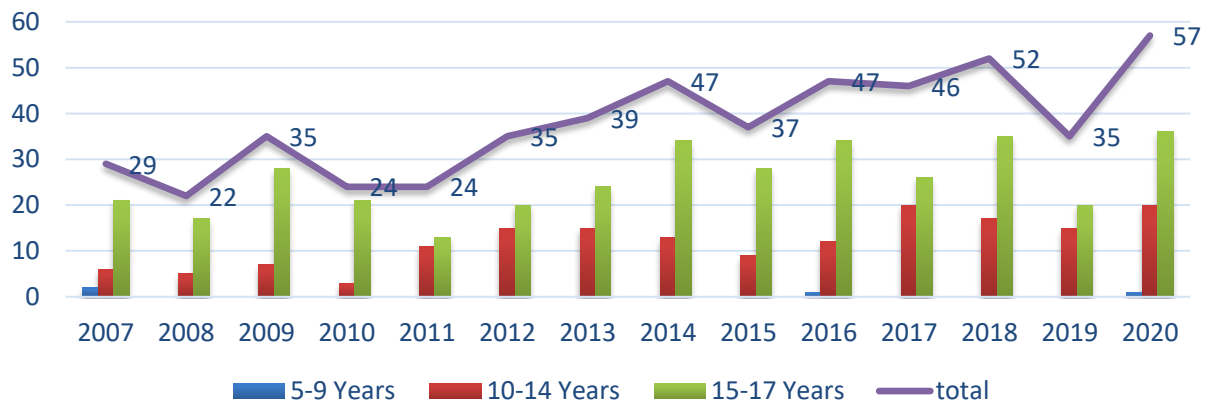
2020 Suicide by Means



2011-2020 Trend, Suicide by Gender



Suicide by Age 2007-2020



UNDETERMINED

There were 76 deaths that were certified as undetermined manner. Of those, 68 deaths were certified as unknown means, 2 deaths were certified as an asphyxiation, 2 were related to firearms, 1 death was related to each of the following: blunt injury, exposure, toxin, and other means of death.

Of the undetermined manner, 64 children were under 1 year of age, 2 children were between ages 1-4 years, 1 child was between ages 10-14 years, and 1 between ages 15-17 years.

As is the case for most of the infants with an undetermined manner, when a known risky or potential unsafe sleeping situation is noted, the possibility of asphyxiation as a result of suffocation cannot be entirely excluded which leads to the certification of an unknown means of death. Additional information on infants in unsafe sleep environments at the time of death can be found in the “2020 Spotlight on Infant Fatality” report on the OCME website under N.C. Child Fatality Prevention Team. (<https://www.ocme.dhhs.nc.gov/nccfpp/index.shtml>)

